

Middlebrook.

December 11, 1956

Dear Gardner:

We've just run into something that I thought would be of particular interest to you:

E. coli protoplasts (in the presence of penicillin) remain sensitive to streptomycin, whether they are genotypically S^S or S^R .

This suggests that the S^R phenotype is a function of the wall, perhaps permeation of the drug. It is also known that S^d mutants form "large bodies" in the absence of the drug, which suggests another wall connection. We're following this up now.

At any rate, this suggests the possibility of overcoming genetic resistance by the use of agents which impair permeability-barriers. I don't know what best to suggest, perhaps even penicillin, for Tb, but I thought you were the most likely person to think how to exploit this possibility.

Yours sincerely, and

With best wishes,

Joshua Lederberg

P.S. Saw you on TV. You obviously enjoyed it immensely. Perhaps you've thought, you'd missed your profession.

also sent message to
Lerni